

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-13 (Canceled).

Please add the following new claims 14-16.

14. (New) A rotatable machine (1) having first and second ends, said machine (1) comprising a chamber (2) and a shaft (3), said shaft (3) mounted in said chamber (2) such that, upon rotation of said shaft (3) and said chamber (2), said shaft (3) and said chamber (2) each rotate about the same axis (4), a first motor (20) for driving the chamber (2) and a second motor (30) for driving the shaft (3), each said motor (20, 30) having an axis, wherein the axes of the first and second motors (20, 30) and the axis (4) of rotation of the chamber (2) and of the shaft (3) are coincident, the first motor (20) and the second motor (30) are both permanent-magnet synchronous motors comprising permanent magnets (22, 32), wherein the first and the second motors (20, 30) are both located at the same end of the machine (1), the rotatable machine further comprising a casing (50) containing both said first and said second motors (20, 30) and first and second shafts (10, 11) adapted for driving the chamber (2) and the shaft (3), respectively, wherein said shafts (10, 11) are concentric and are push-fitted directly into corresponding rotors (21, 31) of the respective motors (20, 30).

15. (New) The rotatable machine according to claim 14, wherein said machine is a centrifuge in which the chamber comprises a bowl and the shaft comprises an endless screw.

16. (New) A centrifuge (1) having first and second ends, said centrifuge (1) comprising a bowl (2) and an endless screw (3), said endless screw (3) mounted in said bowl (2) such that, upon rotation of said bowl (2) and said endless screw (3) said endless screw (3) and said bowl (2) each rotate about the same axis (4), a first motor (20) for driving the bowl (2) and a

second motor (30) for driving the endless screw (3), each said motor (20, 30) having an axis, wherein the axes of the first and second motors (20, 30) and the axis (4) of rotation of the bowl (2) and of the endless screw (3) are coincident, wherein the first motor (20) and the second motor (30) are each permanent-magnet synchronous motors comprising permanent magnets (22, 32), the first and second motors (20, 30) are both located at the same end of the centrifuge (1), the centrifuge further comprising a casing (50) containing both said first and said second motors (20, 30) and first and second shafts (10, 11) adapted for driving the bowl (2) and the endless screw (3), respectively, wherein said shafts (10, 11) are concentric and are push-fitted directly into corresponding rotors (21, 31) of the respective motors (20, 30).